## ABSTRACT

The present invention relates to sensitive, rapid and convenient assays for detection and/or quantification of one or several analyte(s) in solution using so called proximity probes. The proximity probes comprise a binding moiety and a nucleic acid. The nucleic acid from one proximity probe is only capable of interaction with the nucleic acid from the other proximity probe when these are in close proximity, i.e. have bound to the analytes for which they are specific. The present invention relates to methods and kits for proximity probing and are performed in solution without the need of a solid phase.